

In the Abstract:

Please replace the current text in the Abstract with the following:

In the VCD-On-Demand system, the EDA tool has the following attributes: (1) RCC-based parallel simulation history compression and recording, (2) RCC-based parallel simulation history decompression and VCD file generation, and (3) On-demand software regeneration for a selected simulation target range without simulation rerun. When the user selects a simulation session range, the RCC System records a highly compressed version of the primary inputs from the test bench process. The user then selects a narrower region, the simulation target range, within the simulation session range for a more focused analysis. The RCC System dumps the hardware state information of the hardware model into a VCD file. The RCC System then allows the user to proceed directly to view the VCD file from the beginning of the simulation target range without having to rerun the entire simulation from the beginning of the simulation session range.